

1 12. The method of claim 11, further comprising administering to said mammal an
2 antibiotic, an antisecretory agent, a bismuth salt, or a combination thereof.

1 13. The method of claim 12, wherein said antibiotic is selected from the group
2 consisting of amoxicillin, clarithromycin, tetracycline, metronidazole, and erythromycin.

1 14. The method of claim 12, wherein said bismuth salt is selected from the group
2 consisting of bismuth subcitrate and bismuth subsalicylate.

1 15. The method of claim 12, wherein said antisecretory agent is a proton pump
2 inhibitor.

1 16. The method of claim 15, wherein said proton pump inhibitor is selected from
2 the group consisting of omeprazole, lansoprazole, and pantoprazole.

1 17. The method of claim 12, wherein said antisecretory agent is an H₂-receptor
2 antagonist.

1 18. The method of claim 17, wherein said H₂-receptor antagonist is selected from
2 the group consisting of ranitidine, cimetidine, famotidine, nizatidine, and roxatidine.

1 19. The method of claim 12, wherein said antisecretory agent is a prostaglandin
2 analog.

1 20. The method of claim 19, wherein said prostaglandin analog is misoprostil or
2 enprostil.

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1 21. The method of claim 11, further comprising administering to said mammal a
2 prophylactically or therapeutically effective amount of a second Helicobacter polypeptide
3 or a derivative thereof.

1 22. The method of claim 21, wherein the second Helicobacter polypeptide is a
2 Helicobacter urease, or a subunit or a derivative thereof.

1 23. A composition comprising a compound of claim 8, together with a
2 physiologically acceptable diluent or carrier.

1 24. The composition of claim 23, further comprising an adjuvant.

1 25. The composition of claim 23, further comprising a second Helicobacter
2 polypeptide or a derivative thereof.

1 26. The composition of claim 25, wherein said second Helicobacter polypeptide
2 is a Helicobacter urease, or a subunit or a derivative thereof.

1 27. A method of preventing or treating Helicobacter infection in a mammal, said
2 method comprising administering to said mammal a prophylactically or therapeutically
3 effective amount of a polynucleotide of claim 1.

1 28. A method of preventing or treating Helicobacter infection in a mammal, said
2 method comprising administering to said mammal a prophylactically or therapeutically
3 effective amount of a polynucleotide of claim 4.

1 29. A method of preventing or treating *Helicobacter* infection in a mammal, said
2 method comprising administering to said mammal a prophylactically or therapeutically
3 effective amount of a polynucleotide of claim 7.

1 30. A composition comprising a viral vector, in the genome of which is inserted a
2 DNA molecule of claim 3, said DNA molecule being placed under conditions for
3 expression in a mammalian cell and said viral vector being admixed with a
4 physiologically acceptable diluent or carrier.

1 31. The composition of claim 30, wherein said viral vector is a poxvirus.

1 32. A composition that comprises a bacterial vector comprising a DNA molecule
2 of claim 3, said DNA molecule being placed under conditions for expression and said
3 bacterial vector being admixed with a physiologically acceptable diluent or carrier.

1 33. The composition of claim 32, wherein said vector is selected from the group
2 consisting of *Shigella*, *Salmonella*, *Vibrio cholerae*, *Lactobacillus*, *Bacille bilié de*
3 Calmette-Guérin, and *Streptococcus*.

1 34. A composition comprising a polynucleotide of claim 1, together with a
2 physiologically acceptable diluent or carrier.

1 35. The composition of claim 34, wherein said polynucleotide is a DNA molecule
2 that is inserted in a plasmid that is unable to replicate and to substantially integrate in a
3 mammalian genome and is placed under conditions for expression in a mammalian cell.

1 36. An expression cassette comprising a DNA molecule of claim 3, said DNA
2 molecule being placed under conditions for expression in a procaryotic or eucaryotic cell.

1 37. A process for producing a compound of claim 8, which comprises culturing a
2 procaryotic or eucaryotic cell transformed or transfected with an expression cassette of
3 claim 36, and recovering said compound from the cell culture.

1 38. A method of preventing or treating Helicobacter infection in a mammal, said
2 method comprising administering to said mammal a prophylactically or therapeutically
3 effective amount of an antibody that binds to the compound of claim 8.